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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/921,841

08/02/2001

Carl C. McAdams

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7590

02/28/2006

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EXAMINER

LANE, JOHN A

ART UNIT

PAPER NUMBER

2185

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,841

Applicant(s)

MCADAMS, CARL C.

Examiner

Jack A. Lane

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to the CPA filed 10/25/2005. Claims 1-8, 10-14 and 16-19 are presented for examination.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8, 10-14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EFI Application Toolkit MP Protocol Specification in view of Goodman (Pat. Pub No. 2002/0091807).

The EFI Application Toolkit teaches the claimed "base node" as the base node BSP shown in figure 1. The claimed "at least one other node" corresponds to any of nodes AP. The claimed function "instructing...to start a process" corresponds to the function startprocessor() (page 4-11). The claimed step of "starting the process by each...node" corresponds to individual nodes AP executing a process/function. The claimed step of "reporting back results...to the base

node” corresponds to nodes AP sending messages via message arrays (page 3-4). However, accessing a private (local) memory without rebooting is not discussed.

The present specification teaches that firmware is usually stored in private (local) memory of a multi-node processing system (see Background pp. 1-2). Goodman is introduced for it’s teaching of updating firmware stored in PROM (flash memory, EEPROM, etc.) within the nodes 20, 40, 60 and 80 shown in figure 1. A system wide update process of firmware can be delivered through a host system (i.e. boot processor), debug port (i.e. diagnostic node), or external interface located on one or more nodes (see col. 3, [0029]). The examiner contends Goodman’s memory for storing firmware (i.e. PROM, EEPROM, flash memory) corresponds to the claimed “private memory.” This memory is accessed and firmware stored therein updated at the request of the system wide update process. This system wide update process increases the likelihood that the same version of the firmware is running on all the nodes to avoid incompatibility problems (col. 1, [0010]). Other advantages stem from the system wide update as discussed in Goodman.

Noel is introduced as teaching a multiprocessor computer subdivided by software into multiple partitions (see Abstract). Multiple partitions running multiple instances of an operating system can be built on the system shown in figure 1. The partitions can be changed without rebooting the system by modifying the configuration tree (Abstract). Changing the memory allocation of fragments can be handled by an operating system instance modifying the configuration tree without the need for a reboot (see section [0286]). The configuration tree is stored in local address space (local/private memory) (see section [0070]) where it is altered. Any changes made to the configuration tree must be acted upon by each instance affected by the

change (see section [0286]). Rebooting a partition is generally time consuming and reduces processing speed of the partitions.

Because the system wide update process of Goodman avoids incompatibility problems, it would have been obvious to use Goodman's firmware update scheme in the EFI Application in order to update firmware stored within each of the AP processors. Furthermore, Noel's process for updating/changing a configuration tree within the local/private memory of a CPU does so without rebooting the partitions. This saves time and increases operating speed. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention.

4. Applicant's arguments filed 04/20/2005 have been fully considered but they are not deemed to be persuasive.

In the Remarks filed 04/20/2005, applicant has not fully addressed the contribution Noel makes to the combination put forth above. Noel teaches changing firmware (instructions controlling memory allocation) via changes to a configuration tree stored in local address space (local/private memory) without rebooting (section [0070]).

Any response to this action should be mailed to:

Under Secretary of Commerce for Intellectual Property and Director of the
United States Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300, (for Official communications intended for entry)

Or:

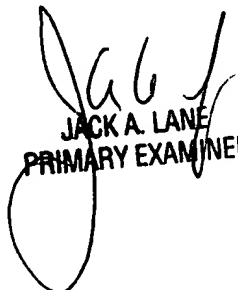
(571) 273-4208, (for Non-Official or draft communications, please label
"Non-Official" or "DRAFT")

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack A. Lane whose telephone number is 571 272-4208. The examiner can normally be reached on Mon-Fri from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571 272-4210.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272-2100


JACK A. LANE
PRIMARY EXAMINER